

Docket No.: GAS-014



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Manfred RENKEL

Confirmation No.

U.S. Patent Application No. 10/585,978

Group Art Unit:

Filed: July 13, 2006

Examiner:

For: METHOD FOR THE PRODUCTION OF CAST COMPONENTS

**SUBMISSION OF PCT DOCUMENT OF PCT/IPEA/409**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is a PCT TRANSLATION OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (PCT/IPEA/409).

The cited reference of US 5,429,796 has been filed. Please accept the document.

Respectfully submitted,

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**PATENT COOPERATION TREATY**  
**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>P802975/WO/1</b>	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. <b>PCT/DE2004/002801</b>	International filing date (day/month/year) <b>22.12.2004</b>	Priority date (day/month/year) <b>21.01.2004</b>
International Patent Classification (IPC) or national classification and IPC <b>C22C14/00 C22F1/18</b>		
Applicant <b>G4T GMBH</b>		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.				
2.	This REPORT consists of a total of <b>4</b> sheets, including this cover sheet.				
3.	This report is also accompanied by ANNEXES, comprising:				
a.	<input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of <b>3</b> sheets, as follows: <table border="0" style="width: 100%;"> <tr> <td><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</td> </tr> <tr> <td><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</td> </tr> </table>			<input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).	<input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
<input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
<input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
b.	<input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s))  _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).				
4.	This report contains indications relating to the following items:				
<input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application					

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/002801

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 

This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
 
  - international search (Rule 12.3 and 23.1(b))
  - publication of the international application (Rule 12.4)
  - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):
 

the international application as originally filed/furnished

the description:
 

pages 1-4 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the claims:
 

nos. 13 as originally filed/furnished

nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
25.02.2006 with letter  
of 24.02.2006

nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

the drawings:
 

sheets \_\_\_\_\_ as originally filed/furnished

sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
 

the description, pages \_\_\_\_\_

the claims, nos. \_\_\_\_\_

the drawings, sheets/figs \_\_\_\_\_

the sequence listing (specify): \_\_\_\_\_

any table(s) related to sequence listing (specify): \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 

the description, pages \_\_\_\_\_

the claims, nos. \_\_\_\_\_

the drawings, sheets/figs \_\_\_\_\_

the sequence listing (specify): \_\_\_\_\_

any table(s) related to sequence listing (specify): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/002801

Box No. V **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Claims	YES
	Claims <u>1-11</u>	NO
Inventive step (IS)	Claims	YES
	Claims <u>1-11</u>	NO
Industrial applicability (IA)	Claims	YES
	Claims <u>1-11</u>	NO

## 2. Citations and explanations (Rule 70.7)

This report is based on the applicant's letter of 24 February 2006 (amended description and claims 1 to 11).

## 1. Reference is made to the following document:

D1: US 5 429 796 A (LARSEN, JR. et al.), 4 July 1995  
(1995-07-04)

2. The application fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 1 is not novel (PCT Article 33(2)). Document D1 discloses (the references in parentheses are to D1) a method for producing components, more particularly gas turbine components, from titanium-aluminium intermetallic material. The Ti-Al material is melted in a crucible. The Ti-Al melt contains (in atom%) between 40 and approximately 52% Ti, between 44 and approximately 52% Al, and one or more of the elements Cr, C, Ga, Mo, Mn, Nb, Ni, Si, Ta, V and W, each in an amount of between approximately 0.05 and approximately 8%. Boride dispersoids are added to the melt in an amount of at least approximately 0.5 vol.% of the melt. The melt is poured into a casting mould.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/002801

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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The application fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).

- 2.1 Dependent claims 2 to 11 do not contain any features that meet the PCT requirements in respect of novelty or inventive step when combined with the features of any of the back-referenced claims (see document D1 and the relevant passages cited in the international search report).
3. Claim 10 fails to meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. The claim seeks to define its subject matter by reference to the result which is to be achieved, but in doing so merely states the problem addressed without specifying the technical features needed in order to achieve that result.